



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBH9807-PO
Job Sheet 187401



Part No: RBH9807-PO

Job Qty: 2 ea

Part Name: Main Transmission Drain Tool



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/4/18

Job Tracking No:

Due Date: 1/1/19

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBH9807 Rev. 1A IPP Rev. A 18.08.28 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	2 pcs		1/1/19	0.00	0.00	Purchasing		DEC 31 2018
110	Packaging	2 pcs		1/1/19	0.00	0.00	Packaging2		DEC 31 2018
120	QC	2 pcs		1/1/19	0.00	0.00	QC6		JAN 02 2019
140	QC	2 pcs		1/1/19	0.00	0.00	QC5 - NOT REQUIRED		9-89
150	Packaging	2 pcs		1/1/19	0.00	0.00	Packaging3		JAN 03 2019
160	QC21-FG	2 Ea		1/1/19	0.00	0.00	QC21		21 JAN 03 2019

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 041931 MANUFACTURE RBH9807 AS PER DWG -
Descriptions: Certificate of conformity is required

Dec 04. 2018 x 2 P/L

GA 137

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBH9807p	Main Transmission Drain Tool	2 pcs (1 ea)	100-Purchasing	5140965

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBH9807p	2	0	0

Part Specifications

Specifications could not be found.

Plex 12/4/18 9:08 AM dart.Lussier.Patrick



Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA

TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S140966



Main Transmission Drain Tool

PART NO: RBH9807
Serial No/Batch: S140966

Revision: PO

Operation: Packaging

Change No:

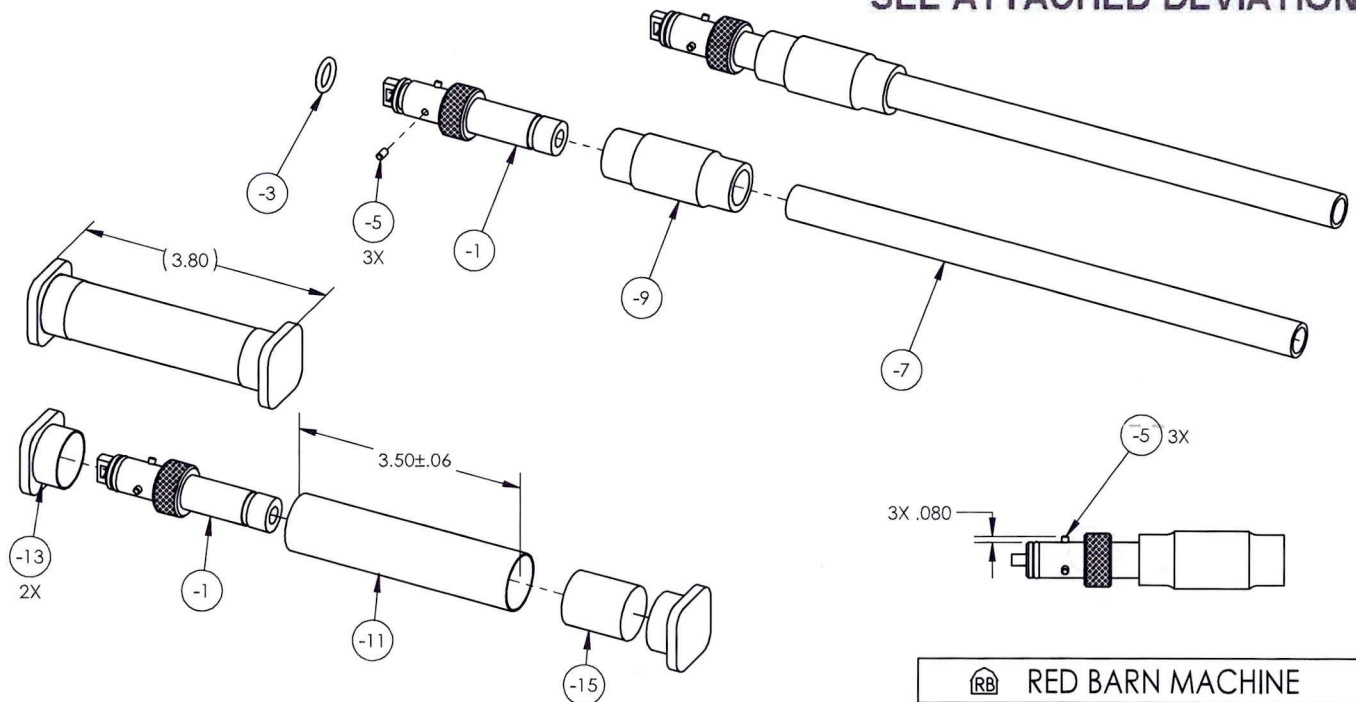
Mfg Date: 12/31/18

Job No: 187401

This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
A	CORRECTED -1 Ø.402 CYLINDRICAL FEATURE PER G.E.	5/9/2011	RJC	RW
I	MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, DELETED CRIMP HOSE CLAMP AND HEAT SHRINK. ADDED -11, -13, -15, EXPLODED VIEWS, AND UPDATED BOM.	7/27/2012	JAG	
1A	-11 CH'D DIM WAS 3.60 IS 3.50. -15 CH'D MATERIAL TO NEW PIG CORP. #PAD210. -1 CH'D Ø.750 TO REFERENCE. CH'D DIM WAS Ø.250±2.700 IS Ø.250±2.70 MAX.	2/5/2014	DPD	RW

SEE ATTACHED DEVIATION



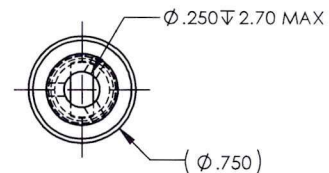
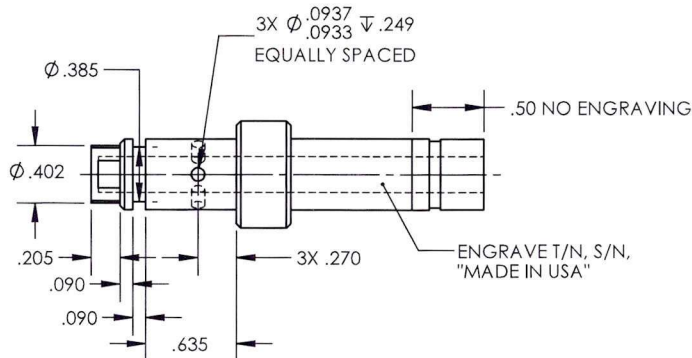
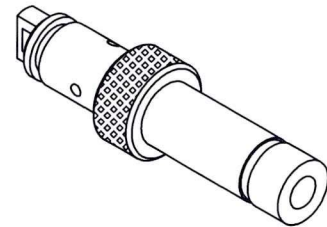
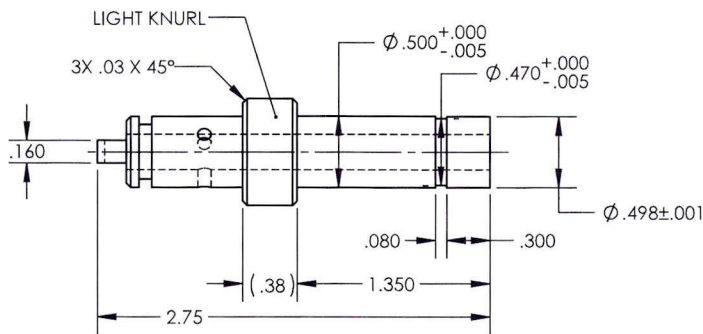
RED BARN MACHINE							TITLE	
MAIN TRANS. DRAIN TOOL							REV 1A	
ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	GUILL	6061	Ø3/4 X 2-7/8	2
		B/O	-3	1	O-RING	VTION	Ø13mm OD x 2mm WIDTH MCMaster-CARR #9263K173	1
		B/O	-5	3	DOWEL PIN	S.S.	Ø3/32 X 3/16 MCMaster-CARR #90145A433	1
		B/O	-7	1	HOSE	VINYL	Ø1/2 O.D. x Ø3/8 I.D. x 6ft KURITECH #K010-0608	1
		B/O	-9	1	COUPLING	NICKEL-PLATED BRASS	Ø1/2 MCMaster-CARR #51495K116	1
		B/O	-11	1	TUBE	POLYETHYLENE	Ø.79 MCMaster-CARR #2044T45	1
		B/O	-13	2	CAP	VINYL	Ø.79 MCMaster-CARR #2044T65	1
		B/O	-15	1	FOAM	POLYESTER/POLYURETHANE	Ø3/4 X 1 NEW PIG CORP. #PAD210	1

RED BARN MACHINE	
MAIN TRANS. DRAIN TOOL	
DWG NO. RBH9807	REV 1A
MAT'L	DRAWN BY: CLOUGH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	APPROVED <i>D. Weil</i>
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	TEST
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	FINISH
	SPEC
	USED ON MODEL
	MD500
SCALE 1:2	DATE 12/9/2010
	SHEET 1 OF 2

This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
A	CORRECTED -1 Ø.402 CYLINDRICAL FEATURE PER G.E.	5/9/2011	RJC	RW
1	INCREASED LENGTH OF STEM FROM .800 TO 1.35, REMOVED BARB AND ADDED GROOVE	7/27/2012	JAG	
1A	-1 CH'D Ø.750 TO REFERENCE. CH'D DIM WAS Ø.250±2.700 IS Ø.250±2.70 MAX.	2/11/2014	DPD	RW

SEE ATTACHED DEVIATION



(-1)
QUILL

RED BARN MACHINE	
MAIN TRANS. DRAIN TOOL	
DWG NO. RBH9807-1	REV 1A
MAT'L 6061	DRAWN BY: CLOUGH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED: <i>D. Weil</i>
.XXX ± .005 FRACTIONS ± 1/32	TREAT FINISH RED ANODIZE
.XX ± .01 ANGLES ± 5°	SPEC MIL-A-8625F, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL MD 500
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 12/9/2010 SHEET 2 OF 2

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



NCR No. _____

Route update only ☐

Job: _____ Part No. RBH9807 Rev. 1a	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042) Oct 30, 2018	
Description Work Order Deviation		Disposition		Completed By	
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)		Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). This deviation is acceptable. The fit, form and function of the part will be as originally intended.		Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☒ X Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041931**

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No: PO041931
PO Date: 12/4/18
Due Date: 1/1/19
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Lussier, Patrick

Ship To:

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	187401	RBH9807p			Main Transmission Drain Tool REV 1A-DEV	Firmed	-	1/1/19	2 pcs	0 pcs	2 pcs	\$495.42/pcs	\$990.84
Grand Total:													\$990.84

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
A049 SUPPLIER AWARENESS

Plex 12/4/18 9:12 AM dart.Lussier.Patrick



**PHGE Machineworks dba
Arrowtech Machineworks**
29751 E Enid Rd. Unit C
Eugene, Oregon 97402
Phone: (541) 780-6938
Fax: (458) 215-4938

Packing Slip

NO. 381

Date: 12/28/2018
PO Ref: 041931
Ship via: Fedex Priority

Bill To:
Dart Aerospace
1270 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K7

Ship To:
Dart Aerospace
1271 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K8

Qty

2

Item

MAIN TRANSMISSION DRAIN TOOL

Part No.

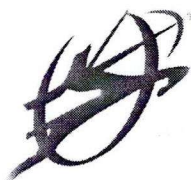
RBH9807

Received by: _____

Packaged by: AMS

Checked by: WJ

Thank You



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: 041931 ✓ Dated: 12/28/2018

Our Order / Job No: 041931-1AWT ✓ Order Qty: 2 ✓

Part Name: MAIN TRANSMISSION DRAIN TOOL

Part Number: RBH9807 ✓

Lot Size: N/A Ship Date: 12/28/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBH9807-1 Rev: 1A

Material Size and Type: -1/6061

Material Specifications: ASTM B221

Heat Treatment: N/A

Plating/Finish: RED ANODIZE MIL-A-8625F, TYPE II, CLASS II

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 12/29/18

Signed: Herminia Fubel

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com